

2021 Consumer Confidence Report

Water System Information

Water System Name: **White Fence Farms Mutual Water Co. 3**

Report Date: June 20, 2022

Type of Water Source(s) in Use: **Purchased Treated Surface Water & Groundwater blended with Purchased Treated Surface Water (began in October 2021)**

Name and General Location of Source(s):

Antelope Valley East Kern Water Agency (AVEK) Connection - Palmdale

Well 01A was not in use January- September 2021.

Well 01A and AVEK Connection "Blend" – Palmdale

Well 2 -Inactive since March 2017 - Palmdale

Drinking Water Source Assessment Information:

Source Water Assessments were conducted for Wells 01A and 02 of White Fence Farms MWC #3 in August 2001 by the [State Water Resources Control Board, Division of Drinking Water](#).

Copies of the complete assessments may be viewed at: [State Water Resources Control Board, Division of Drinking Water](#), 500 North Central Avenue, Suite 500, Glendale, CA 91203.

Additional copies are also available, per email request wffmw3@gmail.com

The Company plans to update the information contained in the source assessment in the near future.

Well 01A – This source is not considered vulnerable to any potentially contaminating activities at this time and not associated with contaminants found in the water. (as of Aug. 2001)

Nitrate has been detected to a level as high as 40 mg/L, which is above half the MCL of 45 mg/L. There is nothing that could be associated with nitrate around the area, so it could be considered as naturally occurring. Another possible reason is a historic animal feeding operation around the area. This land use is rural, so this may be a strong possibility.

Fluoride has been detected at a level of 0.3 mg/L, which is higher than the DLR level of 0.1, but is well below the MCL of 2.0 mg/L. This detection could have come from a possible historic demolition/ construction staging area.

Well 02 – This source is not considered vulnerable to any potentially

contaminating activities at this time that are not associated with contaminants found in the water. (as of Aug 2001)

Nitrate has been detected to a level of 58 mg/L which is above the MCL of 45 mg/L. There is nothing that could be associated with nitrate around the area, so it could be considered as naturally occurring. Another possibility is a historic animal feeding operation around the area. This land use is rural so this may be a strong possibility.

Di-(e-ethylhexyl) phthalate has been detected at a level of 4 ug/L, which is exactly the value of the MCL. There is nothing around the areas associated with this chemical. There may have been historic hardware/lumber/parts store in the general area that may have contributed to this chemical's detection.

In March 2017, Well 2 was inactivated. The well will be destroyed in the future.

Time and Place of Regularly Scheduled Board Meetings for Public Participation:
6:00pm Second Wednesday of every month. At Wellsite 01A, (Due to Covid Restrictions)
Meetings are being held Teleconference- Zoom, Meetings allow for Public Participation

For More Information, Contact: **Brandi Moore (661) 943-6916**

About This Report

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2021 and may include earlier monitoring data.

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse White Fence Farms Mutual Water Co. 3 a (661)943-6916 para asistirlo en español.

Terms Used in This Report

Term	Definition
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level (MCL)	The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
Maximum Contaminant Level Goal (MCLG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).
Maximum Residual Disinfectant Level (MRDL)	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG)	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Primary Drinking Water Standards (PDWS)	MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
Public Health Goal (PHG)	The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Term	Definition
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Secondary Drinking Water Standards (SDWS)	MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions	Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.
ND	Not detectable at testing limit.
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per billion or micrograms per liter (µg/L)
ppt	parts per trillion or nanograms per liter (ng/L)
ppq	parts per quadrillion or picogram per liter (pg/L)
pCi/L	picocuries per liter (a measure of radiation)

Sources of Drinking Water and Contaminants that May Be Present in Source Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

Regulation of Drinking Water and Bottled Water Quality

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

About Your Drinking Water Quality

Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, 5, 6, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Table 1. Sampling Results Showing the Detection of Coliform Bacteria

Complete if bacteria are detected.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
<i>E. coli</i>	(In the year) 0	[Enter No.] 0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

Table 1.A. Compliance with Total Coliform MCL between January 1, 2021 and June 30, 2021 (inclusive)

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a month) 0	[Enter No.] 0	1 positive monthly sample (a)	0	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	(in the year) 0	[Enter No.] 0	0	None	Human and animal fecal waste

(a) For systems collecting fewer than 40 samples per month: two or more positively monthly samples is a violation of the total coliform MCL

For violation of the total coliform MCL, include potential adverse health effects, and actions taken by water system to address the violation: [Enter information]

Table 2. Sampling Results Showing the Detection of Lead and Copper

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	12/14/21	20	.0057	None	15	0.2	Not Applicable	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	12/14/21	20	0.33	None	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 3. Sampling Results for Sodium and Hardness

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Well 01A	See attached AVEK 2021 Water Quality Report 7/30/19	See attached AVEK 2021 Water Quality Report 170	See attached AVEK 2021 Water Quality Report Not Applicable	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Well 01A	See attached AVEK 2021 Water Quality Report 7/30/19	See attached AVEK 2021 Water Quality Report 430	See attached AVEK 2021 Water Quality Report Not Applicable	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 4. Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Nitrate (ppm) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Blend Effluent (Well01A and AVEK)	Oct - Dec 21	See attached AVEK 2021 Water Quality Report 5.10	See attached AVEK 2021 Water Quality Report 4.23 – 5.68	10	0.40	Runoff/leaching from fertilizers use: from septic, and sewage Erosion of natural deposits.
Fluoride (ppm) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Well 01A	7/30/19	See attached AVEK 2021 Water Quality Report 0.25	See attached AVEK 2021 Water Quality Report Not Applicable	2.0	0.10	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories.
Total TTHM (ppm) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Blend Effluent (Well01A and AVEK)	Mar, Jun, Dec 21	See attached AVEK 2021 Water Quality Report 24.32	See attached AVEK 2021 Water Quality Report 10.6 – 36.10	80	1.0	By product of drinking water disinfection.
Total HAA5 (ppm) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Blend Effluent (Well01A and AVEK)	Mar, Jun, Dec 21	See attached AVEK 2021 Water Quality Report 8.62	See attached AVEK 2021 Water Quality Report 3.8 – 13.90	60	1.0	

Table 5. Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Well 01A	7/30/19	See attached AVEK 2021 Water Quality Report 130	See attached AVEK 2021 Water Quality Report Not Applicable	500	1.0	Runoff/leaching from natural deposits; industrial wastes.
Sulfate (ppm) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Blend Effluent (Well01A and AVEK)	Oct - Dec 21	See attached AVEK 2021 Water Quality Report 340	See attached AVEK 2021 Water Quality Report 290 - 370	500	0.50	Runoff/leaching from natural deposits.
Specific Conductance (ECuS/cm) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Blend Effluent (Well01A and AVEK)	Oct - Dec 21	See attached AVEK 2021 Water Quality Report 1241.70	See attached AVEK 2021 Water Quality Report 1150 – 1350	1600	2.0	Substances that form ions when in water, industrial wastes.
Turbidity (NTU) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Blend Effluent (Well01A and AVEK)	Oct - Dec 21	See attached AVEK 2021 Water Quality Report 1.11	See attached AVEK 2021 Water Quality Report 0.74 – 1.68	5	1	Soil Runoff
Iron (Fe) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Blend Effluent (Well01A and AVEK)	Oct - Dec 21	See attached AVEK 2021 Water Quality Report 39.17	See attached AVEK 2021 Water Quality Report 0 – 90.00	300	100	natural existence in underground rock formations and precipitation water that infiltrates through

Manganese (Mn) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Blend Effluent (Well01A and AVEK)	Oct - Dec 21	See attached AVEK 2021 Water Quality Report 39.17	See attached AVEK 2021 Water Quality Report 39.17	50	20	Natural source or because of human activity such as mining and industrial discharges Runoff/Leaching from natural deposits; industrial wastes.
				1000	5.0	
Total Dissolved Solids TDS (ppm) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Blend Effluent (Well01A and AVEK)	Oct - Dec 21	See attached AVEK 2021 Water Quality Report 827.50	See attached AVEK 2021 Water Quality Report 635 – 932.50			

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
Vanadium (ppm) <i>100% AVEK Water Jan-Sep</i> See attached AVEK 2021 Water Quality Report Well 01A	7/30/19	See attached AVEK 2021 Water Quality Report 5.90	See attached AVEK 2021 Water Quality Report Not Applicable	50	Vanadium exposures resulted in developmental and reproductive effects in rats.

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the

water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead-Specific Language: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [Enter Water System's Name] is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/lead>.

Special Language for Nitrate: Infants below the age of six months who drink water containing nitrate of the MCL may quickly become ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

State Revised Total Coliform Rule (RTCR): This Consumer Confidence Report (CCR) reflects changes in the drinking water regulatory requirements during 2021. These revisions add the requirements of the federal Revised Coliform Rule, effective April 1, 2016, to the existing state Total Coliform Rule. The revised rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and *E. coli* bacteria). The U.S. EPA anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water system that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system. The state Revised Total Coliform Rule became effective July 1, 2021.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Permit Condition 24 requires the Company to sample Well 1A weekly for iron and manganese and monthly for color, turbidity, TDS, specific conductance, sulfate, and nitrate, and to	Failing to sample Well 1A weekly for iron and manganese and monthly for color, turbidity, TDS, specific conductance, sulfate, and nitrate, and to	2021	Create a monitoring schedule accordance with the approved plan.	There are no known health effects at this time for drinking water high levels of iron, manganese, turbidity, specific

<p>turbidity, TDS, specific conductance, sulfate, and nitrate, and to sample the AVEK connection monthly and the blended water sampling point weekly for iron, manganese, color, turbidity, TDS, specific conductance, sulfate, and nitrate.</p> <p>Permit Condition 25 requires the Company to submit to the Division results of the samples collected from Well 1A, AVEK Connection and blended water sampling point and the monthly blending mass balance calculation performed in a calendar month the 10th day of the following month</p>	<p>sample the AVEK connection monthly and the blended water sampling point weekly for iron, manganese, color, turbidity, TDS, specific conductance, sulfate, and nitrate.</p> <p>Failing to submit to the Division results of the samples collected from Well 1A, AVEK Connection and blended water sampling point and the monthly blending mass balance calculation performed in a calendar month the 10th day of the following month</p>			<p>conductance, and total dissolved solids, however some people who drink water containing high levels of nitrate have been associated with Hematotoxicity (cause methemoglobinemia) and high levels of manganese in people have been shown to result in effects of the nervous system</p>

For Water Systems Providing Groundwater as a Source of Drinking Water

Table 8. Sampling Results Showing Fecal Indicator-Positive Groundwater Source Samples

Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	(In the year) 0		0	(0)	Human and animal fecal waste
Enterococci	(In the year) 0		TT	N/A	Human and animal fecal waste
Coliphage	(In the year) 0		TT	N/A	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Violation of a Groundwater TT

Special Notice of Fecal Indicator-Positive Groundwater Source Sample: None

Special Notice for Uncorrected Significant Deficiencies: None
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Table 9. Violation of Groundwater TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
None				

For Systems Providing Surface Water as a Source of Drinking Water**Table 10. Sampling Results Showing Treatment of Surface Water Sources**

Treatment Technique ^(a) (Type of approved filtration technology used)	See attached AVEK Water Quality Report.
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	<p>Turbidity of the filtered water must:</p> <p>1 – Be less than or equal to [Enter Turbidity Performance Standard to Be Less Than or Equal to 95% of Measurements in a Month] NTU in 95% of measurements in a month.</p> <p>2 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded for More Than Eight Consecutive Hours] NTU for more than eight consecutive hours.</p> <p>3 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded at Any Time] NTU at any time.</p>
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	
Highest single turbidity measurement during the year	
Number of violations of any surface water treatment requirements	

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Summary Information for Violation of a Surface Water TT

Table 11. Violation of Surface Water TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
See attached AVEK Water Quality Report.				

Summary Information for Operating Under a Variance or Exemption

No Variance or Exemption

Summary Information for Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

If a water system is required to comply with a Level 1 or Level 2 assessment requirement that is not due to an *E. coli* MCL violation, include the following information below [22 CCR section 64481(n)(1)].

Level 1 or Level 2 Assessment Requirement not Due to an *E. coli* MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found no coliforms indicating the need to look for potential problems in water treatment or distribution. However, if this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

None

During the past year we were not required to conduct Level 1 Assessments. No Level 1 assessments were completed. In addition, we were not required to take corrective actions.

During the past year no Level 2 assessments were required to be completed for our water system.

None

[For Violation of the Total Coliform Bacteria TT Requirement, Enter Additional Information Described in Instructions for SWS CCR Document]

None

[For Violation of the Total Coliform Bacteria TT Requirement, Enter Additional Information Described in Instructions for SWS CCR Document]

If a water system is required to comply with a Level 2 assessment requirement that is due to an *E. coli* MCL violation, include the information below [22 CCR section 64481(n)(2)].

SWS CCR

Revised January 2022

None

Level 2 Assessment Requirement Due to an *E. coli* MCL Violation

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found no *E. coli* bacteria, indicating the need to look for potential problems in water treatment or distribution. However, when this occurs, we are required to conduct assessment(s) identify problems and to correct any problems that were found during these assessments.

We were not required to complete a Level 2 assessment because we found no *E. coli* in our water system. In addition, we were not required to take corrective actions.

If a water system failed to complete the required assessment or correct all identified sanitary defects, the water system is in violation of the treatment technique requirement and shall include the following statements, as appropriate:

None

If a water system detects *E. coli* and has violated the *E. coli* MCL, include one or more the following statements to describe any noncompliance, as applicable:

None

[If a water system detects *E. coli* and has not violated the *E. coli* MCL, the water system may include a statement that explains that although they have detected *E. coli*, they are not in violation of the *E. coli* MCL.]

None

Water Conservation Tips:

1. Check Faucets and pipes for leaks. A small leak can waste 20 gallons per day.
2. Don't flush toilet to dispose of cigarettes or facial tissue. 5-7 gallons of water used each flush.
3. Use your water meter to check for leaks outside. Check meter read then use no water for 2 hours and then recheck to see if your meter has advanced.
4. Install water saving showerheads.
5. Short showers use less water than a bath in the tub.
6. Turn off water while brushing your teeth or cleaning vegetables.
7. Plant drought-resistant lawns, shrubs and plants.
8. Put a layer of mulch around trees and plants.
9. Keeps weeds out of gardens and flower beds; weeds take water from the good plants.
10. Sweep driveways, sidewalks and steps instead of hosing them off.
11. Avoid watering lawns when the wind is excessive, or during the hot part of the day.

Check the internet for more water saving ideas, water conservation is very important

ANTELOPE VALLEY – EAST KERN WATER AGENCY

2021 ANNUAL WATER QUALITY REPORT

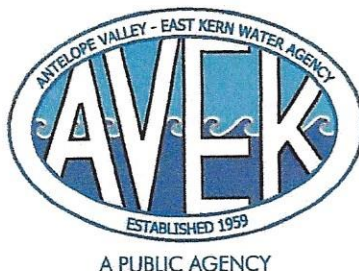
LOS ANGELES COUNTY SYSTEM

OFFICERS

DWAYNE CHISAM, P.E.
General Manager
and Chief Engineer

MATTHEW KNUDSON
Assistant General Manager

HOLLY H. HUGHES
Secretary-Treasurer



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Division 5

AUDREY T. MILLER
Division 6

GARY VAN DAM
Division 7

March 15, 2022

Dear General Manager:

This is the 2021 Annual Water Quality Report from the Antelope Valley-East Kern Water Agency (AVEK). Since the water you obtain from AVEK represents one of your sources of water, we have included a summary of results for all analyses completed in 2021 for your convenience. If you find that you need copies of individual monitoring reports please feel free to contact me and I will be happy to provide those for you.

In accordance with the Consumer Confidence Report (CCR) guidance manuals issued by the State Water Resources Control Board and the United States Environmental Protection Agency, we are herein providing you with the monitoring data and other information you will need to produce your CCR.

AVEK provides some treated water to our customers in Acton by way of an intertie with Palmdale Water District (PWD). AVEK monitors the treated water quality provided by PWD at our Acton Water Treatment Plant before it reaches our first customer. The results of this monitoring have been included in this report. If you have specific questions regarding the quality of the raw water treated by Palmdale Water District, please contact them directly.

If you have any questions or need additional information, please call me at 661-943-3201. However, please do not designate AVEK or this office as your contact in your CCR. According to the State Board and EPA guidelines, the designated contact person should be someone from your system. While we are always happy to answer questions about AVEK water, we do not have the specific information necessary to answer questions about your water, blending practices or distribution systems.

Respectfully,



Jordan Wray
Laboratory Director

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(661) 943-3201 • www.avek.org • info@avek.org

The mission of AVEK is to deliver reliable, sustainable and high quality supplemental water to the region in a cost-effective and efficient manner.

Antelope Valley-East Kern Water Agency routinely monitors for contaminants in our drinking water according to Federal and State laws. The table in this report, "2021 Annual Water Quality Report", shows the results of our monitoring for the period of January 1st to December 31st, 2021.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

We have learned through our monitoring and testing that some contaminants have been detected, however, we are proud to report that our drinking water meets all State and Federal requirements.

Total Coliform: Water systems are required to meet a strict standard for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If the standard is exceeded, the water supplier must notify the public by newspaper, television or radio.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Antelope Valley-East Kern Water Agency

2021 Annual Water Quality Report

We are pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water we have delivered to you over the past year. Our goal is, and always has been, to provide to you a safe supply of drinking water.

Our main water source is the State Water Project, California Aqueduct. The State Water Resources Control Board (State Board) has assessed the vulnerability of the State Water Project as to possible contaminating activities. The assessment's description and discussion of vulnerability is as follows:

"The California Aqueduct originates at the Sacramento-San Joaquin Delta at Clifton Court Forebay. Water in the Delta originates in the Sacramento River watershed, the San Joaquin watershed, and the watershed drainage from the Mokelumne River, Stanislaus River, Merced River and several smaller rivers that drain the eastern slopes of the Sierra Nevadas. Located in these drainage areas are a broad variety of potential sources of contamination including municipal, industrial and agricultural activities. Also influencing the quality of water pumped from the Delta is the impact of the estuarial nature of the Delta and the naturally occurring salt-water intrusion which is dependent to a large extent on the inflow from the contributing rivers.

The possible contaminating activities present within the California Aqueduct watershed are described in the State Water Project Watershed Sanitary Survey conducted by the California Department of Water Resources and their consultants in 1990 and updated in 2016."

Our alternative water source is State Water Project water which has been stored in the aquifer at various underground storage facilities (i.e. "water banks") and is recovered for water quality purposes or supply purposes during times of drought. The vulnerability of the facilities was assessed in 2014 as follows:

"The wells are most vulnerable to contaminants from activities such as herbicide use along transportation corridors or road right-of-ways; agricultural/irrigation wells; irrigated crops; application of fertilizer, pesticides, and herbicides; agricultural drainage; and the raw State Water Project surface water used to recharge the groundwater basins. Other potential contaminating activities include the potential presence of certain unknown activities such as unregistered underground storage tanks."

A copy of these assessments may be viewed at, Antelope Valley-East Kern Water Agency, 6450 West Avenue N, Palmdale, CA 93551.

If you have any questions about this report or the Antelope Valley-East Kern Water Agency, please contact Jordan Wray, Laboratory Director at 661-943-3201. We want our valued customers to be informed about our Water Agency. If you want to learn more, please attend any of our regularly scheduled Board meetings. They are held on the second and fourth Tuesday of every month, 5:30 PM, at the Antelope Valley-East Kern Water Agency Office, 6450 West Avenue N, Palmdale, CA, 93551.

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Parameter	Units	MCL	DLR	PHG	State Water Project Average	Water Bank Wells Range	Water Bank Wells Average
Tetrachloroethylene (PCE)	µg/L	5	0.5	0.06	ND	ND	ND
Toluene	µg/L	150	0.5	150	ND	ND	ND
trans-1,2-Dichloroethylene (t-1,2-DCE)	µg/L	10	0.5	60	ND	ND	ND
trans-1,3-Dichloropropene	µg/L				ND	ND	ND
Trichloroethylene (TCE)	µg/L	5	0.5	1.7	ND	ND	ND
Trichlorofluoromethane (Freon11)	µg/L	150	5	1300	ND	ND	ND
Trichlorotrifluoroethane (Freon 113)	µg/L	1200	10	4000	ND	ND	ND
Vinyl Chloride (VC)	µg/L	0.5	0.5	0.05	ND	ND	ND
Xylenes (Total)	µg/L	1750	0.5	1800	ND	ND	ND

SYNTHETIC ORGANIC CHEMICALS

Parameter	Units	MCL	DLR (DL)	PHG	State Water Project Range	Water Bank Wells Range	Water Bank Wells Average
Alachlor	µg/L	2	1	4		ND	ND
Atrazine	µg/L	1	0.5	0.15		ND	ND
Bentazon	µg/L	18	2	200		ND	ND
Benzo(a)pyrene	µg/L	0.2	0.1	0.007		ND	ND
Carbofuran	µg/L	18	5	0.7		ND	ND
Chlordane	µg/L	0.1	0.1	0.03		ND	ND
2,4-D	µg/L	70	10	20		ND	ND
Dalapon	µg/L	200	10	790		ND	ND
Dibromochloropropane (DBCP)	µg/L	0.2	0.01	0.0017		ND	ND
Di(2-ethylhexyl)adipate	µg/L	400	5	200		ND	ND
Di(2-ethylhexyl)phthalate	µg/L	4	3	12		ND	ND
Dinoseb	µg/L	7	2	14		ND	ND
Diquat	µg/L	20	4	6		ND	ND
Endothall	µg/L	100	45	94		ND	ND
Endrin	µg/L	2	0.1	0.3		ND	ND
Ethylene Dibromide (EDB)	µg/L	0.05	0.02	0.01		ND	ND
Glyphosate	µg/L	700	25	900		ND	ND
Heptachlor	µg/L	0.01	0.01	0.008		ND	ND
Heptachlor Epoxide	µg/L	0.01	0.01	0.006		ND	ND
Hexachlorobenzene	µg/L	1	0.5	0.03		ND	ND
Hexachlorocyclopentadiene	µg/L	50	1	2		ND	ND
Lindane	µg/L	0.2	0.2	0.032		ND	ND
Methoxychlor	µg/L	30	10	0.09		ND	ND
Molinate	µg/L	20	2	1		ND	ND
Oxamyl	µg/L	50	20	26		ND	ND
Pentachlorophenol	µg/L	1	0.2	0.3		ND	ND
Picloram	µg/L	500	1	166		ND	ND
Polychlorinated Biphenyls	µg/L	0.5	0.5	0.09		ND	ND
Simazine	µg/L	4	1	4		ND	ND
Thiobencarb (Bolero)	µg/L	70	1	42		ND	ND
Toxaphene	µg/L	3	1	0.03		ND	ND
2,3,7,8-TCDD (Dioxin)	pg/L	30	5	0.05		ND	ND
2,4,5-TP (Silvex)	µg/L	50	1	3		ND	ND
1,2,3-Trichloropropane	µg/L	0.005	0.005	0.0007		ND	ND

DISINFECTION RESIDUAL, PRECURSORS, and BYPRODUCTS

Type of Sample(s)	Parameter	Units	MCL/MRDL	DLR	MRDLG	RESULTS Range	Average
Distribution	Chlorine (as total Cl ₂)	mg/L	4.0		4	0.30 - 1.68	1.12
Treated Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.3		0.52 - 1.9	1.2
State Water Project	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.3		0.72 - 3.2	1.9
Distribution	Stage 2 D/DBP Rule Total Trihalomethanes	µg/L	80**			3.2 - 54	41 #
Distribution	Stage 2 D/DBP Rule Total Haloacetic Acids	µg/L	60**			ND - 8.5	4.9 #
Treated Water	Bromate	µg/L	10*	1.0		ND - 4.5	0.82

** Stage 2 D/DBP Rule Total THMs and Total HAAs compliance is based upon Locational Running Annual Averages.

Location with the highest TTHM average

* Compliance is based on the running annual average computed quarterly, of monthly samples, collected at the entrance to the distribution system.

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The Antelope Valley-East Kern Water Agency provides treated surface water as a source of drinking water.

Treatment technique: Conventional

EPA Turbidity Performance Standards: Turbidity of the filtered water must:

1. Be less than or equal to 0.30 NTU in 95% of measurements in a month.
2. Not exceed 1 NTU at any time.

Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1: **100%**

Highest single turbidity measurement during the year: **0.18 NTU**

Percentage of samples < 0.30 NTU: **100%**

The number of violations of any surface water treatment requirements: **NONE**

Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

The Antelope Valley-East Kern Water Agency also provides groundwater as a source of drinking water.

Treatment technique: Chlorination

EPA Groundwater Rule: AVEK meets the requirements of the Groundwater Rule by providing a minimum of 4-log reduction of viruses by continuously providing a minimum free chlorine residual of 0.5 mg/L leaving the clearwell.

Lowest single free chlorine residual measurement during the year: **0.5**

Number of violations of the Groundwater Rule: **NONE**

MICROBIOLOGICAL CONTAMINANTS

Type of Sample(s)	Parameter	Sampling Frequency	MCL	No. of Months in Violation	System Results Range	Average
Distribution	Total Coliform Bacteria	120 - 150 / mo	5% positive	None	0%-0.8%	0.1%
Distribution	Fecal Coliform/E. coli	120 - 150 / mo	1 pos. with 2 TC pos.	None	0%	0%

INORGANIC CONTAMINANTS

INORGANIC CONTAMINANTS																
RESULTS																
Parameter	Units	MCL	DLR	PHG or (MCLG)	Acton Plant Effluent (CWR)		Eastside Plant Effluent (CWR)		Quartz Hill Plant Effluent (CWR)		Raw Influent (State Water Project)		Water Bank Effluent (CWR)		Wells	
					Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average
Aluminum	µg/L	1000	50	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Antimony	µg/L	6	6	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	µg/L	10	2	0.004	ND	ND	ND	ND	ND	ND	2.7-5.6	4.6	3.4-7.0	5.2	ND-22	4.8
Barium	µg/L	1000	100	2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Beryllium	µg/L	4	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	µg/L	5	1	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium (Total)	µg/L	50	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium (Hexavalent)	µg/L	*	1	0.02	0.19	0.19	3.5	ND	ND	ND	ND	ND	ND	ND	ND-5.2	3.1
Cyanide	µg/L	150	100	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoride	mg/L	2	0.1	1	0.19	0.11	ND	ND	ND	ND	0.16	ND	ND	ND	0.12-0.34	0.18
Lead	µg/L	15	5.0	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	µg/L	2	1	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	µg/L	100	10	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrate (as N)	mg/L	10	0.4	10	ND	2.4	0.85	0.54-0.77	0.65	ND	ND	ND	ND	ND	0.72-7.8	4.2
Nitrite (as N)	mg/L	1	0.4	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrate+Nitrite (as N)	mg/L	10		10	ND	2.4	0.85	0.77	0.77	ND	ND	ND	ND	ND	0.72-7.8	4.6
Perchlorate	µg/L	6	4	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	µg/L	50	5	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND-7.0	0.58
Thallium	µg/L	2	1	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Asbestos	MFL	7	0.2	7							ND	ND	ND	ND	ND	ND
The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.																

*There is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.

GENERAL PHYSICAL AND SECONDARY STANDARDS

Parameter	Units	MCL	DLR	RESULTS									
				Acton Plant Effluent (CWR)		Eastside Plant Effluent (CWR)		Quartz Hill Plant Effluent (CWR)		Raw Influent (State Water Project)		Water Bank Wells	
				Range	Average	Range	Average	Range	Average	Range	Average	Range	Average
Aluminum	µg/L	1000	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	mg/L	no standard		29	48	26	27	63-93	76				
Chloride	mg/L	250		96	37	59	57	54-92	72				

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Parameter	Units	MCL	DLR	Acton Plant Effluent (CWR)		Eastside Plant Effluent (CWR)		Quartz Hill Plant Effluent (CWR)		Raw Influent (State Water Project)		Water Bank Wells	
				Range	Average	Range	Average	Range	Average	Range	Average	Range	Average
Color	Units	15			<5		<5		<5		10	<5	<5
Copper	µg/L	1000	50		ND		ND		ND		ND	ND	ND
Foaming Agents (MBAS)	mg/L	0.5			ND		ND		ND		ND	ND	ND
Hardness (Total) as CaCO ₃	mg/L	no standard			99		130		74		76	180-280	230
Iron	µg/L	300	100		ND		ND		ND		ND	ND	ND
Magnesium	mg/L	no standard			6.4		3.0		2.3		2.1	5.0-15	9.0
Manganese	µg/L	50	20		ND		ND		ND		ND	ND	ND
Odor @ 60 C	Units	3	1		<1		<1		<1		1	<1	<1
pH	Units	no standard		6.8-7.5	7.1	7.2-8.6	7.7	7.0-7.5	7.2	7.9-9.5	8.8	7.6-7.8	7.6
Silver	µg/L	100	10		ND		ND		ND		ND	ND	ND
Sodium	mg/L	no standard			73		40		60		59	38-62	45
Specific Conductance	µmhos	1600			560	450-460	460	470-480	480	340-660	490	550-850	660
Sulfate	mg/L	250	0.5		52		62		74		54	44-75	56
Thiobencarb (Bolero)	µg/L	1	1		ND		ND		ND		ND	ND	ND
Methyl tert-Butyl Ether (MTBE)	µg/L	5	3		ND		ND		ND		250	330-500	400
Total Dissolved Solids	mg/L	500			300		280		260		250	ND	ND
Turbidity	Units	5		0.02-0.15	0.05	0.02-0.10	0.05	0.02-0.20	0.05	0.20-12	1.8	0.05-0.10	0.05
Zinc	µg/L	5000	50		420		ND		650		ND	ND	ND
Total Alkalinity (as CaCO ₃)	mg/L	no standard			63		96		47	62-96	76	140-200	160
Bicarbonate Alkalinity(as HCO ₃)	mg/L	no standard			76		120		58		80	160-240	190
Carbonate (as CO ₃)	mg/L	no standard			ND		ND		ND		ND	ND	ND
Hydroxide (as OH)	mg/L	no standard			ND		ND		ND		ND	ND	ND

RADIOLOGICAL CONTAMINANTS

Parameter	Units	MCL	DLR	PHG	RESULTS		
					Raw Influent (State Water Project)	Water Bank Wells	
Gross Alpha	pCi/L	15	3		3.4	ND-9.4	5.3
Gross Beta	pCi/L	50	4		ND		
Strontium 90	pCi/L	8	2	0.35	ND		
Tritium	pCi/L	20,000	1,000	400	ND		
Uranium	pCi/L	20	1	0.43		4.8-6.9	6.0
Radium 228	pCi/L		1	0.019			
Radium 226	pCi/L		1	0.05			

VOLATILE ORGANIC CONTAMINANTS

Parameter	Units	MCL	DLR	PHG	RESULTS		
					State Water Project	Water Bank Wells	
1,1,1-Trichloroethane (1,1,1-TCA)	µg/L	200	0.5	1000	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/L	1	0.5	0.1	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	µg/L	5	0.5	0.3	ND	ND	ND
1,1-Dichloroethane (1,1-DCE)	µg/L	5	0.5	3	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	µg/L	6	0.5	10	ND	ND	ND
1,2,4-Trichlorobenzene	µg/L	5	0.5	5	ND	ND	ND
1,2-Dichlorobenzene (o-DCB)	µg/L	600	0.5	600	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	µg/L	0.5	0.5	0.4	ND	ND	ND
1,2-Dichloropropane	µg/L	5	0.5	0.5	ND	ND	ND
1,3-Dichloropropene (Total)	µg/L	0.5	0.5	0.2	ND	ND	ND
1,4-Dichlorobenzene (p-DCB)	µg/L	5	0.5	6	ND	ND	ND
Benzene	µg/L	1	0.5	0.15	ND	ND	ND
Carbon tetrachloride	µg/L	0.5	0.5	0.1	ND	ND	ND
cis-1,2-Dichloroethylene (c-1,2-DCE)	µg/L	6	0.5	100	ND	ND	ND
cis-1,3-Dichloropropene	µg/L				ND	ND	ND
Dichloromethane (Methylene Chloride)	µg/L	5	0.5	4	ND	ND	ND
Ethylbenzene	µg/L	300	0.5	300	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	µg/L	13	3	13	ND	ND	ND
Monochlorobenzene (Chlorobenzene)	µg/L	70	0.5	70	ND	ND	ND
Styrene	µg/L	100	0.5	0.5	ND	ND	ND

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DEFINITIONS and FOOTNOTES:

Plant Effluent, CWR, is finished, treated drinking water.

Raw Water is the Source Water, the California Aqueduct or wells, prior to treatment.

Units: mg/L = milligrams per liter, parts per million (ppm)

µg/L = micrograms per liter, parts per billion (ppb)

pg/L = picograms per liter, parts per quadrillion (ppq)

µmhos = micromhos, a measure of specific conductance

pCi/L = pico Curies per liter

< = less than

> = greater than

ND = none detected above the DLR

NTU = nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set by the US Environmental Protection Agency or the State Water Resources Control Board as close to the PHGs and MCLGs as is economically or technologically feasible.

MRDL: Maximum Residual Disinfectant Level. The level of a disinfectant added for water treatment that may not exceed at the consumer's tap.

DLR: Detection Limit for purposes of Reporting.

(DL): Detection limit determined by the Laboratory when no DLR has been established.

MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

MRDLG: Maximum Residual Disinfectant Level Goal. The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the US Environmental

Protection Agency.

PHG: Public Health Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Office of Environmental Health Hazard

Assessment.

Primary Drinking Water Standard: Primary MCLs, specific treatment techniques adopted in lieu of primary MCLs, and monitoring and reporting requirements for MCLs that are specified in regulations.

Assessment.

Secondary Standards: Aesthetic standards established by the State Water Resources Control Board.

All analyses performed by ELAP certified laboratories: AVEK Water Agency, Eurofins Eaton Analytical Laboratories, or Eurofins subcontract lab.

Water System Name:	Antelope Valley-East Kern Water Agency
System No.	1910045

MP1=3 Qtrs Ago, MP2=2 Qtrs Ago, MP3= Last Qtr, MP4=Current Qtr
LRAA = Locational Running Annual Avg = (MP1+MP2+MP3+MP4)/4
OEL = Operational Evaluation Levels = (MP2 + MP3 + 2MP4)/4
TTHM MCL = 0.080 mg/L

Quarterly Bromate Report for Disinfection Byproducts Compliance (in µg/L or ppb)

System Name: Antelope Valley-East Kern Water Agency System No.: 1910045 Year: 2021 Quarter: 4TH

Sample Date (month/date):	2020				1st Qtr.				2nd Qtr.				3rd Qtr.				4th Qtr.			
	1st Q	2nd Q	3rd Q	4th Q	1/13	2/10	3/10	Quarterly Average	4/14	5/12	6/9	Quarterly Average	7/14	8/11	9/8	Quarterly Average				Quarterly Average
Site 1 - QHWP	1.6	1.3	5.4	3.9	OFF	OFF	OFF	0.0	ND	3.9	3.0	2.3	3.6	4.5	ND	2.7	OFF	OFF	OFF	OFF
Site 2 - EWTP	1.3	1.0	3.0	3.3	OFF	OFF	ND	0.0	ND	ND	ND	0.0	1.0	2.0	1.6	1.5	OFF	OFF	OFF	OFF
Site 3 - AWTP	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
System Quarterly Average	1.5	1.2	4.2	3.6				0.0				1.2				2.1				0.0
Running Annual Average				2.6				2.2				2.2				1.7				0.8
Meets Standard?*								Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Identify the sample locations in the table below.

Site	Sample Location
1	Quartz Hill Clear Well Reservoir
2	Eastside Clear Well Reservoir
3	Acton Clear Well Reservoir

Comments: Samples collected at the entry point to the distribution system for each treatment plant using ozone. "OFF" denotes treatment plant shutdown or ozone system shutdown.

Signature

Date 1/5/2022

*If, during the first year of monitoring, any individual quarter's average will cause the running annual average of that system to exceed the standard, then the system is out of compliance at the end of that quarter.

**Quarterly Report for Disinfectant Residuals Compliance
For Systems Using Chlorine or Chloramines**

System Name: Antelope Valley-East Kern Water Agency System No.: 1910045

Calendar Year: 2021

Quarter: 4TH

1st Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
Previous Year	April	1.10
	May	1.04
	June	1.10
	July	1.16
	August	1.17
	September	1.11
	October	1.08
	November	1.06
	December	1.08
Current Year	January	120
	February	120
	March	150
Running Annual Average (RAA):		1.09
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl ₂)		YES

2nd Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
Previous Year	July	1.16
	August	1.17
	September	1.11
	October	1.08
	November	1.06
	December	1.08
Current Year	January	1.09
	February	1.05
	March	1.08
	April	120
	May	120
	June	150
Running Annual Average (RAA):		1.10
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl ₂)		YES

3rd Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
Previous Year	October	1.08
	November	1.06
	December	1.08
Current Year	January	1.09
	February	1.05
	March	1.08
	April	1.10
	May	1.11
	June	1.14
	July	120
	August	150
	September	120
Running Annual Average (RAA):		1.11
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl ₂)		YES

4th Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
Current Year	January	1.09
	February	1.05
	March	1.08
	April	1.10
	May	1.11
	June	1.14
	July	1.15
	August	1.18
	September	1.17
	October	120
	November	150
	December	123
Running Annual Average (RAA):		1.12
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl ₂)		YES

Comments:

Signature: 

Date: 1/5/2022

Antelope Valley-East Kern Water Agency
LA System No. 1910045
TOC Removal Running Annual Average

Sample Date	Plant	Alkalinity mgCaCO ₃ /L	Raw TOC mg/L	Treated TOC mg/L	Actual % TOC reduction	Required % TOC reduction	"TOC Removal Ratio" actual % / required %
1/13/2021	QHWTP	80.6	2.09	1.27	39.2	25	1.6
"	EWTP	plant off					
"	AWTP	plant off					
2/10/2021	QHWTP	89.3	2.05	1.32	35.6	25	1.4
"	EWTP	86.6	2.09	1.39	33.5	25	1.3
"	AWTP	plant off					
3/10/2021	QHWTP	96.2	2.07	1.35	34.8	25	1.4
"	EWTP	97.4	2.10	1.42	32.4	25	1.3
"	AWTP	plant off					
4/14/2021	QHWTP	82.3	2.01	1.35	32.8	25	1.3
"	EWTP	81.0	2.28	1.45	36.4	25	1.5
"	AWTP	plant off					
5/12/2021	QHWTP	81.7	1.42	1.03	27.5	25	1.1
"	EWTP	81.5	2.17	1.47	32.3	25	1.3
"	AWTP	plant off					
6/9/2021	QHWTP	75.6	1.52	1.06	30.3	25	1.2
"	EWTP	75.0	2.07	1.57	24.2	25	1.0
"	AWTP	plant off					
7/14/2021	QHWTP	69.3	1.82	1.15	36.8	25	1.5
"	EWTP	70.3	2.16	1.39	35.6	25	1.4
"	AWTP	plant off					
8/11/2021	QHWTP	67.0	2.28	1.46	36.0	25	1.4
"	EWTP	65.0	3.24	1.92	40.7	25	1.6
"	AWTP	plant off					
9/8/2021	QHWTP	73.5	1.31	0.91	30.5	25	1.2
"	EWTP	59.4	1.78	1.09	38.8	35	1.1
"	AWTP	plant off					
10/13/2021	QHWTP	69.9	1.72	1.15	33.1	25	1.3
"	EWTP	plant off					
"	AWTP	plant off					
11/10/2021	QHWTP	62.7	1.04	0.69	33.7	25	1.3
"	EWTP	plant off					
"	AWTP	plant off					
12/8/2021	QHWTP	61.5	0.72	0.52	27.8	25	1.1
"	EWTP	plant off					
"	AWTP	plant off					
Minimum		59.4	0.7	0.5	24.2		
Maximum		97.4	3.2	1.9	40.7		
RAA		76.3	1.9	1.2	33.6		

Running Annual Average (RAA) 1.3

Title 22 California Code of Regulations, Chapter 15.5, Article 5:

Required percent TOC reduction**

Raw TOC	Source Water Alkalinity		
	0-60	<60 - 120	>120
>2.0 - 4.0	35.0 %	25.0 %	15.0 %
>4.0 - 8.0	45.0 %	35.0 %	25.0 %
>8.0	50.0 %	40.0 %	30.0 %

**If one or more of the section 64636.4(b) 1-6 conditions are met, the system may assign a monthly value of 1 for the TOC removal ratio in lieu of the calculated value.

List condition when used:

1. The system's source water TOC level, prior to any treatment is less than or equal to 2.0 mg/L
2. The system's treated water TOC level is less than or equal to 2.0 mg/L
3. The system's source water SUVA, prior to any treatment, is less than or equal to 2.0 L/mg-m
4. The system's finished water SUVA is less than or equal to 2.0 L/mg-m
5. A system practicing softening removes at least 10 mg/L of magnesium hardness (as CaCO₃)
6. A system practicing enhanced softening lowers alkalinity below 60 mg/L (as CaCO₃)